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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HOYE, MICHAEL W

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 01/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/512,226

Applicant(s)

HUCKINS, JEFFREY L.

Examiner

Michael W. Hoye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "20" in Fig. 1 and "22" in Fig. 2 have both been used to designate the transport medium (the specification refers to the transport medium as 22 on pages 5, 8 and 11, lines 17, 9 and 19 respectfully, and it can therefore be assumed that the transport medium should be labeled with the character "22" in Figure 1). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: server 18 in Figure 1, and make connection 62 in Figure 5. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the following details described in the specification:

- storage media 115 coupled to the controller 106, in Figure 2, as described on page 11, lines 5 and 13, and page 15, line 16;
- transceiver 116, as described on page 11, line 19;
- link 20, as described on page 11, line 23;
- PID 34a, as described on page 13, line 17;

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- PID 34c, as described on page 13, line 18;

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

4. Claims 10-13 and 20-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims set forth steps in a process which does not constitute statutory subject matter because the claim limitations do not either perform an independent physical act (that is, a post computer process activity), or manipulate data representing physical objects or activities to achieve a practical application (that is, a pre-computer process activity), and in fact merely manipulate an abstract idea without any limitation to a practical application.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 5-11, 13-15, 18-21, and 24-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Arsenault et al (EP 0 828 390 A2).

Note the Arsenault et al reference, which discloses a method for a digital broadcast network for providing content description and connection information. The claimed step of transmitting content is met by the ground-based processing and uplink facility 10 as shown in Figure 1 and described in col. 12, line 30 – col. 13, line 8, where various content providers supply content to the processing and transmission facility 10 which includes the main processing equipment 15 for receiving program inputs and generating appropriate output signals 27 for transmission to the satellites 11 by means of an uplink antenna 16, in addition, alternative transmission and broadcasting methods, utilizing other space or ground-based media 13 such as cable, optical fiber, or various wireless systems may also be used. The claimed step of transmitting a first announcement including connection information for said content is met by an allocation table or "map" 30, which identifies the broadcast resource which is to be utilized at a given time for transmission of a particular input data stream (see col. 13, line 36 – col. 14, line 11, also see Map Select ID 98 in Fig. 7). The claimed method of transmitting a second announcement including a content description for said content is met by input data streams 20, which may comprise video information, audio information, data services of various types (e.g. multimedia, database services, software delivery, e-mail, etc.), or other information which is desired for transmission to one or more users (e.g. subscribers) as shown in Figure 1 (see col. 13, lines 1-6, also see input 26 and program information 96 in Fig. 7).

As to claim 2, the claimed method of claim 1 including the step of transmitting said first announcement after transmitting the second announcement is met by content and/or schedule information which must be supplied in advance of the connection information (see col. 14, lines 12-21).

As to claim 5, the claimed method of claim 1 further including the step of providing a service identifier with said second announcement to link with said first announcement is met by the program stream including appropriate identifiers with upcoming program content of the various service providers, as well as map service identifiers 98 which link the description to the connection (see Figure 7 & col. 25, lines 20-29, and line 42 – col. 26, line 2).

As to claim 6, the claimed method of claim 5 including the step of specifying the location of service in said connection information is met by the data stream containing information to the appropriate source and it's location (see col. 19, lines 31-36).

As to claim 7, the claimed method of claim 6 further including the step of transmitting ancillary information with said content is met by the data streams comprising video information, audio information, data services of various types, or other information as described in col. 13, lines 1-8.

As to claim 8, the claimed method of claim 2 further including the step of providing an identifier to link said first and second announcements is met by the program identifier in 96 of Fig. 7 and Map Select ID 98 (col. 25, line 18 – col. 26 line 2).

As to claim 9, the claimed method of claim 1 wherein the step of transmitting said connection information includes transmitting a data program guide is met by Fig. 7 where the control packets periodically include information 94 concerning upcoming program content of the various service providers, such as program guide (PG) information (see col. 25, lines 26-40).

As to claim 10, the claim is analyzed with respect to claim 1.

As to claim 11, the claim is analyzed with respect to claim 2.

As to claim 13, the claim is analyzed with respect to claim 8.

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As to claim 14, note the Arsenault et al reference, which discloses a method for digital broadcast network for providing content description and connection information. The claimed step of receiving content is met by the receiving station 12 as shown in Figure 1 and described in col. 14, lines 30-45, where the receiving station 12 includes a receiving dish 32 which receives the satellite transponder signal 33 which is sent to an integrated receiver transponder (IRD 34). The claimed step of receiving a first announcement including connection information for said content is met by tuner 37, processor(s) 38, and "local" map 40, which receive and correspond to the desired broadcast resource (see Fig. 1 & col. 14, line 46 – col. 15, line 27). The claimed step of receiving a second announcement including a content description for said content is met by tuner 37 and processor(s) 38 for receiving, identifying, and selecting packets of information from the data streams (see Fig. 1 & col. 14, line 54 – col. 15, line 9). The claimed step of linking said first and second announcements to one another is met by the processor(s) 38, and "local" map 40 which provides correspondence between the incoming broadcast resources and data streams (see Fig. 1 and col. 15, lines 10-27, also see Fig. 7, program identifier 96 and map select ID 98).

As to claim 15, the claimed method of claim 14 wherein the step of receiving said second announcement includes receiving said second announcement after said first announcement is met by receiving the local map corresponding to a channel selection and then receiving updated information for that source ID connection (see col. 15, lines 10-27, and the appropriate identifying headers 93 occurring before the Program Guide information 94 in Fig. 7 and col. 25, line 23).

As to claim 18, the claimed method of claim 14 including the step of identifying a service identifier with said second announcement to link to said first announcement is met by the TDM

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broadcast resource data stream 91 that includes individual packets 92 of program information (video, audio, or data) with identifying headers 93 (see Figure 7 & col. 25, lines 20-29), this provides a link from the content (program) information to the connection information (source/service provider), in addition a map select identifier 98 (Fig. 7) may also be appended to the map data (see col. 25, line 58 – col. 26, line 2).

As to claim 19, the claimed method of claim 18 including the step of identifying the location of service in said connection information is met by the local map containing information to the appropriate source and it's location (see col. 19, lines 31-36).

As to claim 20, the claim is analyzed with respect to claim 14.

As to claim 21, the claim is analyzed with respect to claim 15.

As to claim 24, the claim is analyzed with respect to claim 18.

As to claim 25, the claim is analyzed with respect to claim 19.

As to claim 26, the claimed processor is met by processor 15 as shown in Figure 1 (see col. 13, lines 36-50). The claimed transmitter coupled to said processor to transmit a first and second announcement and video content is met by uplink antenna 16 as shown in Figure 1 which transmits the first and second announcements and video content (see col. 12, line 43 – col. 13, line 12). The claimed first announcement including connection information for said content is met by an allocation table or "map" 30, which identifies the broadcast resource which is to be utilized at a given time for transmission of a particular input data stream (see col. 13, line 36 – col. 14, line 11, also see Map Select ID 98 in Fig. 7), and said second announcement including a content description for said content is met by input data streams 20, which may comprise video information, audio information, data services of various types (e.g. multimedia, database

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services, software delivery, e-mail, etc.), or other information which is desired for transmission to one or more users (e.g. subscribers) as shown in Figure 1 (see col. 13, lines 1-6, also see input 26 and program information 96 in Fig. 7).

As to claim 27, the claimed system of claim 26 wherein said transmitter transmits an identifier that may be used to link said first and second announcements is met by the program identifier in 96 of Fig. 7 and Map Select ID 98 (col. 25, line 18 – col. 26 line 2).

As to claim 28, the claimed system of claim 26 wherein said transmitter transmits said second announcement before said first announcement is met by content and/or schedule information which must be supplied in advance of the connection information (see col. 14, lines 12-21).

As to claim 29, the claimed processor is met by processor 38 as shown in Figure 1 (see col. 15, lines 5-9). The claimed receiver coupled to said processor to link a first with a second announcement is met by receiving dish 32 and tuner 37 as shown in Figure 1 (see col. 14, line 30 – col. 15, line 7). The claimed said first announcement including connection information for video content is met by the local map (col. 15, lines 10-26), identifying headers 93 in Fig. 7 (col. 25, lines 20-24) and map select ID 98 in Fig. 7 (col. 25, lines 41-58), and the claimed said second announcement including a content description for said content is met by program stream 91 in Fig. 7 (see col. 25, lines 20-40)

As to claim 30, the claimed system of claim 29 wherein said receiver links said first and second announcements is met by the processor(s) 38, and “local” map 40 which provides correspondence between the incoming broadcast resources and data streams (see Fig. 1 and col. 15, lines 10-27, also see Fig. 7, program identifier 96 and map select ID 98).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-4, 12, 16-17, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arsenault et al, in view of Yoshinobu et al (USPN 5,686,954), cited by the examiner.

As to claim 3, the Arsenault et al reference discloses the method of claim 2 including the step of arranging said content with more than one component or item as shown in Figures 4 and

7. However, the Arsenault et al reference does not explicitly disclose arranging said content description with at least two levels of granularity or detail. The Yoshinobu et al reference discloses a program information broadcasting method that teaches arranging said content description with at least two levels of granularity, such as a group hierarchy, as shown in Figures 2-4, where the program schedule data contains information on multiple channels, the channels (CH_n) contain groups of program information (PG), each program information group has a program ID 51, which contains multiple item IDs 56 (see col. 10, line 25 – col. 11, line 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Arsenault et al such that it arranges said content description with at least two levels of granularity as taught by Yoshinobu et al. One of ordinary skill in the

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art would have been lead to make such a modification since it is well known to arrange content descriptions with multiple levels of detail for use in an electronic program guide (EPG).

As to claim 4, the Yoshinobu et al reference as combined with the Arsenault et al reference above further discloses the claimed step of including linking each of said granularity levels to connection information for said granularity as met by at least one kind of items of the program sub information SB is identical with one of the kind of item 55 of the main program information, which serves as a link (see Figures 1C & 2, and col. 11, line 53 – col. 12, line 2).

As to claim 12, the Arsenault et al reference discloses the article of claim 11 further storing instructions that cause a processor based system to arrange said content with more than one component or item as shown in the content 96 of Figure 7. However, the Arsenault et al reference does not explicitly disclose to arrange said content description with at least two levels of regularity. Yoshinobu et al discloses the claimed system to arrange said content description with at least two levels of regularity, such as a group hierarchy, as shown in Figures 2-4, where the program schedule data or “content description” contains information on multiple channels, the channels (CH_n) contain groups of program information (PG), each program information group has a program ID 51, which contains multiple item IDs 56 (see col. 10, line 25 – col. 11, line 58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the article for storing instructions of Arsenault et al such that it arranges said content description with at least two levels of regularity as taught by Yoshinobu et al. One of ordinary skill in the art would have been lead to make such a modification since it is well known to arrange content descriptions with multiple levels of detail for use in an electronic program guide (EPG).

As to claim 16, the Arsenault et al reference discloses the method of claim 15 including the step of identifying said content description with more than one component or item as shown in Figures 4 and 7. However, the Arsenault et al reference does not explicitly disclose identifying at least two levels of granularity in said content description. Yoshinobu et al discloses a program information broadcast receiving method that teaches identifying at least two levels of granularity in said content description, such as a group hierarchy, as shown in Figures 2-4, where the program schedule data contains information on multiple channels, the channels (CHn) contain groups of program information (PG), each program information group has a program ID 51, which contains multiple item IDs 56 (see col. 10, line 25 – col. 11, line 58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Arsenault et al such that it specifically includes identifying at least two levels of granularity in said content description as taught by Yoshinobu et al. One of ordinary skill in the art would have been lead to make such a modification since it is well known to identify at least to levels of granularity in content descriptions comprising multiple levels of detail for use in an electronic program guide (EPG).

As to claim 17, the Yoshinobu et al reference as combined with the Arsenault et al reference above further discloses the claimed step of including linking each of said granularity levels to connection information for said granularity as met by at least one kind of items of the program sub information SB is identical with one of the kind of item 55 of the main program information, which serves as a link (see Figures 1C & 2, and col. 11, line 53 – col. 12, line 2).

As to claim 22, the claim is analyzed with respect to claim 16.

As to claim 23, the claim is analyzed with respect to claim 17.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Donnelly, Daniel B. (USPN 6,460,181) – Discloses an EPG display and receiver, as well as multiple types of data tables with various groups IDs and other types of IDs and links.

Tsukidate et al (USPN 6,414,720) – Discloses a digital broadcasting system using virtual channels, a receiver with hard disk storage capability, has channel mapping and program IDs and additional program, source, and data information.

Arsenault et al (USPN 6,278,717) – Discloses a data communication system with dynamic mapping of broadcast resources – similar to European Patent Application.

Eyer et al (USPN 6,160,545) – Discloses granularity levels or groupings with configuration data for a multi-regional interactive program guide for television.

Ozkan et al (USPN 6,115,074) – Discloses a system for forming and processing program map information and further includes receiver with storage medium and various guide tables and group levels.

Chaney et al (USPN 6,064,378) – Discloses a program guide in a digital video system, the transmission of ancillary data and various signal component packets.

Hawkins et al (USPN 6,005,561) – Discloses an interactive information delivery system with MPEG-2 transport layer.

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Arsenault et al (USPN 5,886,995) - Discloses a data communication system with dynamic mapping of broadcast resources – related to European Patent Application.

Wasilewski, Anthony (USPN 5,418,782) – Discloses methods and an apparatus for providing virtual service selection in a multi-service communications system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is (703) 305-6954. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (703) 305-4795.

Any response to this action should be mailed to:

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or faxed to:

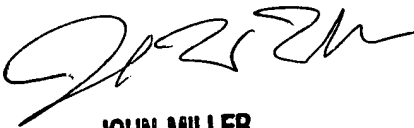
(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Michael W. Hoye
December 20, 2002



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600